

Amendments to the Claims:

10. (Currently Amended) A two-side multiple lamp online inner quality inspection system comprising:

transport means for continuously running and conveying objects of inspection one by one by placing each of the objects on a receiving tray;

a transmission light passage being formed in the receiving tray ~~therein~~ to vertically penetrate the center part thereof and a light blocking receiving seat being arranged at the upper part of said transmission light passage in an annular shape to elastically engage the object in a tight contact therewith;

light projecting means for projecting beams of light on the object from lateral direction both left and right by using a plurality of light projecting lamps at a predetermined position of said transport means;

light receiving means arranged to converge and receive as transmission light the projected beams of light coming through the inside of the object of inspection and passing downwardly through the transmission light passage of the receiving tray ~~with the beams of light projected;~~

means for making spectral analysis on said transmission light received, said transport means extending underneath the receiving tray, which runs through the transport path, and which is arranged to be able to locate the light receiving means fixed closely underneath the receiving tray running through the inspecting position;

said light projecting means having a large number of light projecting lamps set in a lamp box and arranged on both the right and left sides of a transport path to concentratedly

project a light from lateral direction on the object on said receiving tray at an inspecting position from different positions and at different angles in such a way as to cover a wide area of said object ranging from an obliquely front part to an obliquely rear part on each of the right and left sides of the object;

said light receiving means having a condenser lens with dust-proof means arranged upwardly below said receiving tray to converge transmission light coming through said transmission light passage which vertically penetrate said receiving tray, and a combining mount part forming a dark room through said condenser lens and a mount part to lead the transmission light to the spectrometer, and which is arranged to have the light entrance plane of an optical fiber at the focal point in said combining mount part to lead the transmission light converged by the optical fiber to said spectrometer ~~and a spectrometer arranged in combination with said condenser lens through a combining mount part which is arranged to lead converged transmission light to said spectrometer.~~

11. (Previously Presented) A system according to claim 10, wherein said combining mount part of said light receiving means is arranged to have the light entrance plane of an optical fiber at the focal point of said condenser lens and to lead the converged transmission light to said spectrometer through said optical fiber.

12. (Previously Presented) A system according to claim 10, wherein said combining mount part of said light receiving means is arranged to have the focal point of said condenser lens coincide with an entrance slit of said spectrometer.

13. (Previously Presented) A system according to claim 10, wherein the quantity of light coming into said spectrometer is arranged to be reducible by arranging means for selectively inserting light reducing filters of varied kinds in a light receiving optical path provided at said combining mount part between said condenser lens and said spectrometer.

14. (Previously Presented) A system according to claim 10, wherein a transmission light shutter is arranged in said light receiving optical path of said combining mount part between said condenser lens and said spectrometer to block the passing of the transmission light every time one receiving tray passes with the object of inspection placed thereon; and said shutter is actuated to open when the transmission light passage of said receiving tray is on the visual field of said condenser lens and to close when the transmission light passage comes outside of the visual field, so that no light is allowed to come into said spectrometer when no inspecting operation is performed.

15. (Currently Amended) ~~A system according to claim 10, wherein said condenser lens is provided with a lens hood which is arranged to secure a visual field on the object side of said condenser lens and a light receiving window which is made of transparent glass and disposed on the front side of said lens hood to form a dust-proof structure; and dust-proof means is arranged on the outside of said transparent glass to blow air from the periphery thereof toward the center of said light receiving window~~ A two-side multiple lamp online inner quality inspection system comprising:

transport means for conveying objects of inspection one by one by placing each of the objects on a receiving tray;

a receiving tray in which a transmission light passage is formed to vertically penetrate the center part thereof and a light blocking receiving seat being arranged at the upper part of said transmission light passage in an annular shape to elastically engage the object in a tight contact therewith;

light projecting means for projecting beams of light on the object by using a plurality of light projecting lamps at a predetermined position of said transport means;

light receiving means arranged to converge and receive as transmission light, from underneath the receiving tray, the projected beams of light coming through the inside of the object of inspection and passing downwardly through the transmission light passage of the receiving tray;

means for making spectral analysis on said transmission light received, said light receiving means having an air blow hole arranged to blow an air from lateral direction toward the center of upper surface of light receiving window of lens hood of condenser lens located upwardly underneath the receiving tray, and which is arranged to proof upper surface of the condense lens from dust by generating an air flow from upper surface of the light receiving window toward the outside direction.

16. (Previously Presented) A system according to claim 10, further comprising a white-level calibrating plate moving mechanism which is arranged to retractably move a white level calibrating plate forward to cover the receiving seat of said receiving tray from outside of the transport path of said receiving tray when no inspecting object is on said receiving tray at the inspecting position where said light projecting means and said light receiving means are disposed, and wherein calibration can be automatically carried out by moving said white

level calibrating plate forward to cover said receiving seat of said receiving tray when a predetermined number of empty receiving trays pass the inspecting position.

17. (Previously Presented) A system according to claim 10, further comprising means for increasing or decreasing the quantity of light projected by said large number of light projecting lamps of said projecting means by increasing or decreasing a number of light projecting lamps to be lighted up among said large number of light projecting lamps according to the size of the inspecting object or the light transmissible degree of the inspecting object which vary with the kind of the inspecting object.

18. (Currently Amended) ~~A system according to claim 10, further comprising a light blocking device which is arranged in front of said large number of light projecting lamps of said light projecting means to block light from being projected on the inspecting object~~ A system according to claim 10, wherein said light projecting means includes a lamp box for mounting the plurality of light projecting lamps on both right and left sides of the transport path, and the projecting window of the lamp box is arranged to concentratedly project a light on the object on the receiving tray at an inspecting position ranging from an obliquely front part to an obliquely rear part on each of the right and left sides of the object, and having a light blocking shutter at said projecting window to make and break thereof to block light from being projected on the object with the light of lamp on.

19. (New) A system according to claim 15, wherein said light projecting means includes a lamp box for mounting the plurality of light projecting lamps on both right and left sides of the transport path, and the projecting window of the lamp box is arranged to concentratedly project a light on the object on the receiving tray at an inspecting position ranging from an obliquely front

part to an obliquely rear part on each of the right and left sides of the object, and having a light blocking shutter at said projecting window to make and break thereof to block light from being projected on the object with the light of lamp on.

20. (New) A two-side multiple lamp online inner quality inspection system comprising:

transport mean for conveying objects of inspection one by one by placing each of the objects on a receiving tray;

a transmission light passage being formed in the receiving tray to vertically penetrate the center part thereof and a light blocking receiving seat being arranged at the upper part of said transmission light passage in an annular shape to elastically engage the object in a tight contact therewith;

light projecting means for projecting beams of light on the object by using a plurality of light projecting lamps at a predetermined position of said transport means;

light receiving means arranged to converge and receive transmission light coming through the inside of the object of inspection with the beams of light projected;

means for making spectral analysis on said transmission light received, said light projecting means having a large number of light projecting lamps arranged on both the right and left sides of a transport path to concentratedly project on the object on said receiving tray at an inspecting position from different positions and at different angles in such a way as to cover a wide area of said object ranging from an obliquely front part to an obliquely rear part on each of the right and left sides of the object;

said light receiving means having a condenser lens arranged below said receiving tray to converge transmission light coming through said transmission light passage which vertically penetrate said receiving tray and a spectrometer arranged in combination with said condenser lens

through a combining mount part which is arranged to lead converged transmission light to said spectrometer;

wherein said condenser lens is provided with a lens hood which is arranged to secure a visual field on the object side of said condenser lens and a light receiving window which is made of transparent glass and disposed on the front side of said lens hood to form a dust-proof structure; and dust-proof means is arranged on the outside of said transparent glass to blow air from the periphery thereof toward the center of said light receiving window.

21. (New) A two-side multiple lamp online inner quality inspection system comprising:

transport mean for conveying objects of inspection one by one by placing each of the objects on a receiving tray;

a transmission light passage being formed in the receiving tray to vertically penetrate the center part thereof and a light blocking receiving seat being arranged at the upper part of said transmission light passage in an annular shape to elastically engage the object in a tight contact therewith;

light projecting means for projecting beams of light on the object by using a plurality of light projecting lamps at a predetermined position of said transport means;

light receiving means arranged to converge and receive transmission light coming through the inside of the object of inspection with the beams of light projected;

means for making spectral analysis on said transmission light received, said light projecting means having a large number of light projecting lamps arranged on both the right and left sides of a transport path to concentratedly project on the object on said receiving tray at an inspecting position from different positions and at different angles in such a way as to cover a wide area of

said object ranging from an obliquely front part to an obliquely rear part on each of the right and left sides of the object;

said light receiving means having a condenser lens arranged below said receiving tray to converge transmission light coming through said transmission light passage which vertically penetrate said receiving tray and a spectrometer arranged in combination with said condenser lens through a combining mount part which is arranged to lead converged transmission light to said spectrometer;

means for increasing or decreasing the quantity of light projected by said large number of light projecting lamps of said projecting means by increasing or decreasing a number of light projecting lamps to be lighted up among said large number of light projecting lamps according to the size of the inspecting object or the light transmissible degree of the inspecting object which vary with the kind of the inspecting object.